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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

licant: Borlez

Examiner: Art Unit:

Serial No: 10/767,829 Filed: January 28, 2004

For: PLANAR ANTENNA

9213 Chillicothe Road Kirtland, Ohio 44094

July 29, 2004

COMMISSIONER OF PATENTS P. O. BOX 1450 Alexandria, Virginia 22313-1450

## INFORMATION DISCLOSURE STATEMENT PURSUANT TO 37 C.F.R. §§1.97 AND 1.98

Dear Sir:

A. (1) Applicant hereby discloses the following United States and Foreign Patent Document(s) and Applications pursuant to 37 C.F.R. §1.98:

	Publication No.	Publication Date	Inventor
1.	US4893126	01-19-1990	Evans
2.	US5497163	03-05-1996	Lohninger
3.	US5656980	08-12-1997	Zimmerman
4.	US5657024	08-12-1997	Shingyoji
5.	US5717399	02-10-1998	Urabe
6.	US5764189	06-09-1998	Lohninger
7.	US5877726	03-02-1999	Kudoh

8.	US5966090	10-12-1999	McEwan
9.	US6061025	05-09-2000	Jackson
10.	US6064862	05-16-2000	Greon
11.	US6175723	01-16-2001	Rothwell
12.	US6198438	03-06-2001	Herd
13.	US6377217	04-23-2002	Zhu
14.	US6441787	08-27-2002	Richards
15.	US6501427	12-31-2002	Lilly
16.	EP 0 6823832 A2	11-15-1995	Oprea
17.	EP 0 707220 A2	04-17-1996	Shingyoji
18.	EP 0805 360 A2	11-05-1997	Tohya
19.	WO 01/92671	05-31-2001	Etterlin

- B. Copies of the foreign patents and literature are included herewith pursuant to 37 C.F.R. §1.98.
  - C. Explanation of Relevance pursuant to 37 C.F.R. §1.98.
- 1. US4893126, issued 01-19-1990 to Evans discloses an integrated millimeter-wave transceiver.
- 2. US5497163, issued 03-05-1996 to Lohninger discloses a doppler radar module using micro-stripline technology.
- 3. US5656980, issued 08-12-1997 to Zimmerman discloses multiple output RF filter and wavequide.

- 4. US5657024, issued 08-12-1997 to Shingyoji discloses a radar module and radar system.
- 5. US5717399, issued 02-10-1998 to Urabe discloses a radar device for vehicle use.

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- 6. US5764189, issued 06-09-1998 to Lohninger discloses a doppler radar module.
- 7. US5877726, issued 03-02-1999 to Kudoh discloses an antenna device of the type including an array antenna.
- 8. US5966090, issued 10-12-1999 to McEwan discloses a differential pulsed radar motion sensor.
- 9. US6061025, issued 05-09-2000 to Jackson discloses a tunable microstrip patch antenna and control system.
- 10. US6064862, issued 05-16-2000 to Greon discloses a method and apparatus for external band selection of a digital microwave radio.
- 11. US6175723, issued 01-16-2001 to Rothwell discloses a self structuring antenna system with a switchable antenna array and an optimizing controller.
- 12. US6198438, issued 03-06-2001 to Herd discloses a reconfigurable microstrip antenna array geometry which utilizes micro-electrical-mechanical system switches.
- 13. US6377217, issued 04-23-2002 to Zhu discloses a serially-fed phased array antennas with dielectric phase shifters.
- 14. US6441787, issued 08-27-2002 to Richards, discloses a microstrip phase shifting reflect array antenna.
- 15. US6501427, issued 12-31-2002 to Lilly disclose a tunable patch antenna.
- 16. EP 0 6823832 A2, published 11-15-1995, inventor Oprea discloses a microwabe integrated tuned detector.
- 17. EP 0 707220 A2, published 04-17-1996, inventor Shingyoji discloses a radar module and

radar system.

- 18. EP 0805 360 A2, published 11-05-1997 to Tohya, discloses a multibeam radar system.
- WO 01/92671, published 05-31-2001, inventor Etterlin discloses a patch antenna.No fee is believed due as this information disclosure statement is being timely filed.Please charge deposit account 23-3060 if any fee deficiency exists.

Respectfully submitted,

Kenneth L. Mitchell

Reg. No. 36,873 (440) 256-4150

PTO/SB/08A (08-03)
Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of 1

Complete if Known			
Application Number	10/767,829		
Filing Date	January 28, 2004		
First Named Inventor	Borlez		
Art Unit			
Examiner Name			
Attorney Docket Number	8089-cont		

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Document Number  Number-Kind Code <sup>2 (# known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		<sup>US-</sup> 4,893,126	01-09-1990	Evans	entire document
		<sup>US-</sup> 5,497,163	03-05-1996	Lohninger et al.	entire document
		<sup>US-</sup> 5,656,980	08-12-1997	Zimmerman	entire document
		<sup>US-</sup> 5,657,024	08-12-1997	Shingyoji	entire document
		<sup>US-</sup> 5,717,399	02-10-1998	Urabe	entire document
		<sup>US-</sup> 5,764,189	06-09-1998	Lohninger	entire document
		<sup>US-</sup> 5,877,726	03-02-1999	Kudoh	entire document
		<sup>US-</sup> 5,966,090	10-12-1999	McEwan	entire document
		<sup>US-</sup> 6,061,025	05-09-2000	Jackson	entire document
		<sup>US-</sup> 6,064,862	05-16-2000	Greon	entire document
		<sup>US-</sup> 6,175,723	01-16-2001	Rothwell	entire document
		<sup>US-</sup> 6,198,438	03-06-2001	Herd	entire document
		<sup>US-</sup> 6,377,217	04-23-2002	Zhu	entire document
		<sup>US-</sup> 6,441,787	08-27-2002	Richards	entire document
		<sup>US-</sup> 6,501,427	12-31-2002	Lilly	entire document
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Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T <sup>6</sup>
		EP 0 682 382 A2	11-15-1995	Oprea	entire document	
		EP 0 707 220 A2	04-17-1996	Shingyoji	entire document	
		EP 0 805 360 A2	11-05-1997	Tohya	entire document	
		WO 01/92671 A1	05-31-2001	Etterlin	entire document	

Examiner	Date	
Signature	Considered	
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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.